

ABSTRACT

THESIS: Solid Waste Management in Puerto Rico: An Assessment of Environmental
Impacts and Benefits

STUDENT: José F. Martínez-Colón

DEGREE: Master of Science – Natural Resources and Environmental Management

COLLEGE: Science and Humanities

DATE: July 2011

PAGES: 120

Municipal solid waste (MSW) management has been a challenging issue throughout history. Waste management options have evolved, but they can present distinct environmental impacts, such as the emission of greenhouse gases (GHG). This study quantified the environmental benefits (i.e., greenhouse gas emission and energy use reductions) of various MSW management plans proposed for Puerto Rico through the use of the Waste Reduction Model (WARM). The waste management initiative known as the “Base Case” was found to offer the most environmental benefits. Thus, higher benefits can be attained from the implementation of an integrated solid waste management.